

REMARKS/ARGUMENTS

A. Amendment to the Claims

Claims 1-4, 6, 9, 11-12, 22, 23, 44-55 and 57-76 were in the application. Claims 1, 48, 49, 55, 60 and 75 are amended. Claims 6, 9, 11-12, 22, 23, 44, 57-59, 68-74 and 76 are cancelled in this amendment. New claims 77 and 78 are added. Therefore, claims 1-4, 45-55, 60-67, 75, and 77-78 remain under examination.

Independent claims 1 and 60 have been amended to provide that each retainer cavity has an opening of a size smaller than the diameter of the driver, wherein the driver can not enter through the opening and into the retainer cavity when the plug is in its second rotated position. Support is from claim 44, now canceled.

Claims 1 is also amended to provide a single, separate change tool having an upper edge, with which the lock is reconfigured for the at least first user key and second user key. Support is found in para. [0191] and Figure 1, and in claim 48.

Claim 60 is also amended to provide that a separate change tool having a linear upper edge. Support for the amendment is likewise found in para. [0191] and Figure 1, and in claim 48.

Claims 1 and 60 are further amended to provide that, when the plug is in the second rotated position and the change tool is inserted within the change tool slot, the upper edge of the change tool raises any of the plurality of change balls disposed in its respective retainer cavity to a position where, upon subsequent rotation of the plug away from the second rotated position, the change ball is removed from the retainer cavity and isolated in the corresponding driver chamber. One example of support is found in paras. [0155] and [0156] and in Figures 10A – 12B.

Claim 48 is amended to delete a redundant feature of the claim.

Claim 49 is amended to change the dependency to claim 60.

Claim 55 is amended to change the dependency to claim 1.

Claim 75 is amended to change the dependency to claim 60 and to correct antecedent basis.

New claims 77 and 78 depend from claim 1 and 60, respectively, and provide that the upper edge of the inserted change tool raises at least the centerline of the change ball above the shear line. Support is found at para. [0146].

Applicant believes that no new matter has been added by way of the amendments to the claims, and that no claim fees are due.

B. Double Patenting over Applicant's co-pending applications (and issued patents)

The Examiner raises a provisional obviousness-type double patenting rejection against Applicant's commonly-owned, co-pending Application 11/178,627 (Attorney docket EZL-005M), assigned to EZ Change Lock Company, LLC. The Examiner considers that the inventions, though not identical, are not patentably distinct from each other "because they substantially claim the same subject matter, and claims 1- 16, and 19-22 of the '627 application fully encompass the subject matter of the claims of the instant application".

The Examiner also raised a provisional obviousness-type double patenting rejection against Applicant's commonly-owned, co-pending Application 11/192,755 (Attorney docket EZL-004M), assigned to EZ Change Lock Company, LLC. (This application has since issued as US Patent 7,290,418). The Examiner considers that the inventions, though not identical, are not patentably distinct from each other "because they substantially claim the same subject matter, and claims 1-17 and 21-23 of the '755 application fully encompass the subject matter of the claims of the instant application".

The Examiner also raises a provisional obviousness-type double patenting rejection against Applicant's commonly-owned, co-pending Application 11/374,299 (Attorney docket EZL-006), assigned to EZ Change Lock Company, LLC. The Examiner considers that the inventions, though not identical, are not patentably distinct from each other "because they substantially claim the same subject matter, and claims 1-8 of the '299 application fully encompass the subject matter of the claims of the instant application".

Applicant respectfully requests reconsideration and withdrawal of the double patenting rejections, for the following reasons.

First, there is an established patent rule that when a basic patent is filed before, but issues after, an improvement patent, the order of issuance is disregarded and the later-issuing basic patent is upheld if the improvement patent is not obvious in light of the basic patent. *See 3 D. Chisum, Patents, § 9.03 [2][c] (2000)* and binding precedents of the CAFC cited therein.

Further, MPEP 804 addresses non-statutory obviousness-type double patenting. Two-way obviousness is required when the reference patent (or for a provisional rejection, the “other applications”) is the later filed application, and where both (1) the applicant could not have filed the conflicting claims of the later filed application in a single and earlier application, and (2) there have been delays on the part of the Office causing delay in prosecution of the earlier filed application.

The present application includes priority claims to US provisional applications 60/469025 and 60/481298, filed May 8, 2003 and August 27, 2003, respectively. These priority dates are more than a year earlier than the earliest priority claim of the reference applications 11/178,627, 11/192,755 (now US Patent 7,290,418), and 11/374,299. A review of the scope of the inventions would clearly establish that the invention of the present application is the dominant invention, while those inventions in the reference applications are either improvements in the dominant patent, or improvements in the more general field of rekeyable locks. Applicant also asserts that the claims of the reference patent (and of the reference applications) includes at least one feature which was not disclosed in the present dominate application, and therefore such claims in any of the three reference applications could not have been filed in present application.

Applicant also believes that the record would support a determination that any delays in the examination of the present application are due, at least in part, on the part of the Office.

Two-way obviousness requires finding of obviousness both ways: (1) the claims of the present earlier application must be found obvious over the claims of the issued patent (7,290,418), and the claims of the issued patent (7,290,418) must be found obvious over the claims of the present earlier application. Applicant believes that none of the claims of any of the issued patent or the provisionally-rejected two reference patent applications are obvious in light of the present application claims.

The claims of US Patent 7,290,418 provide a programmable lock assembly similar to the presently claimed programmable lock, though also including a first means that cooperates with the contour edge of one of the plurality of user keys for enabling rotation of the plug with said one user key when inserted into the keyway and rotated in the first direction to the operating position; and a second means that cooperates with the contour edge of said one user key for preventing rotation of the plug in the second direction to the programming position with said one user key when inserted into the keyway, and that cooperates with the contour edge of the

programming key for allowing rotation of the plug with the programming key when inserted into the keyway and rotated in the second direction to the programming position.

These features are not obvious in view of the claims of the present application.

Therefore, at least one of the two-way obviousness analyses with respect to US Patent 7,290,418 does not compel a conclusion of obviousness, and an appropriate double patenting rejection has not been made. Applicant requests withdrawal of the non-statutory obviousness-type double patenting rejection with respect to US Patent 7,290,418 (US application 11/192,755).

The claims of US Application 11/178,627 provide a programmable lock assembly similar to the presently claimed programmable lock, though also including at least one main retainer cavity formed into the periphery, being spaced apart a first circumferential direction and distance from the at least one main tumbler chamber, and aligned with the at least one main driver chamber when the plug is rotated to the main programming position, and not being alignable with an at least one temporary driver chamber when the plug is rotated to the temporary programming position; and at least one temporary retainer cavity formed into the periphery, the at least one temporary retainer cavity, being spaced apart a second circumferential direction and distance from the at least one temporary tumbler chamber, the second circumferential direction and distance being different from the first circumferential direction and distance, and being aligned with the at least one temporary driver chamber when the plug is rotated to the temporary programming position, and not being alignable with the at least one main driver chamber when the plug is rotated to the main programming position.

These features are not obvious in view of the claims of the present application.

Therefore, at least one of the two-way obviousness analyses with respect to US Application 11/178,627 does not compel a conclusion of obviousness, and an appropriate double patenting rejection has not been made. Applicant requests withdrawal of the provisional non-statutory obviousness-type double patenting rejection with respect to Application 11/178,627.

The claims of US Application 11/374,299 provide a programmable lock assembly similar to the presently claimed programmable lock, though also including a change tooling configured integrally with the plug, and comprising a plurality of biasing surfaces, each biasing surface associated with one of the plurality of retainer cavities, the change tooling being moveable between a first position and a second position a plurality of tumblers, wherein the plurality of biasing surfaces displace all of the plurality of change members disposed within respective retainer cavities from said respective retainer cavities when the change tooling is manipulated

into its second position.

These features are not obvious in view of the claims of the present application.

Therefore, at least one of the two-way obviousness analyses with respect to US Application 11/374,299 does not compel a conclusion of obviousness, and an appropriate double patenting rejection has not been made. Applicant requests withdrawal of the provisional non-statutory obviousness-type double patenting rejection with respect to Application 11/374,299.

C. Rejection of Claims 1-4, 6, 9, 11, 12, 22, 45-52, 55, 58-60, 63-65, 68-72 and 76 under 35 USC 103(a) over Monahan (4,386,002) in view of EP 0918124.

The Examiner states “Monahan teaches a lock including a housing 30, a plug 34, springs 49, drivers 44, pins 45, plural keys regarded user keys of a set, a programming key and a master key with different (raised and lowered) contour edges received in the keyway passage 62, a change tool slot 52, a change tool 51, change members 47 moved by the change tool as seen in figure 14 after the plug is rotated. Monahan also teaches a shim defined by the topmost wafer 47 as seen in figure 12. With respect to paragraph “e)” of claim 6, for example, the lock of Monahan is capable of being reconfigured solely in response to a key, by removing the change tool such as in the figure 11 condition and then inserting a key, rotating the key, and allowing a change member 47 to fall within the retainer cavity. As seen in figure 17, the EP (124) reference teaches using a ball (e) as a change member with a retainer cavity (f). It would have been obvious to substitute a ball in place of, or in addition to, the plural change member discs 47 of Monahan, in view of the teaching of the EP (124) reference, the motivation being to prevent jamming between the topmost disc 47 in the retainer cavity and the shear line in the figures 13 and 14 position of Monahan.”

Without acquiescing to the characterization of the Monahan and EP'124 references made in the rejection, Applicant requests reconsideration of the rejection in view of the amendments made to Claims 1 and 60.

Applicant calls to the Examiner's attention that Claim 1 has been amended to incorporate the feature of claim 44 regarding the diameter of the retainer cavity, and the feature that the single, separate change tool has an upper edge, which can be used to reconfigure the lock for the at least first user key and second user key, by raising any of the plurality of change balls disposed in its respective retainer cavity to a position where, upon subsequent rotation of the

plug away from the second rotated position, the change ball is removed from the retainer cavity and isolated in the corresponding driver chamber.

Claim 60 has been amended to incorporate the feature of claim 44 regarding the diameter of the retainer cavity, and the feature that the separate change tool has a linear upper edge which raises any of the plurality of change balls disposed in its respective retainer cavity to a position where, upon subsequent rotation of the plug away from the second rotated position, the change ball is removed from the retainer cavity and isolated in the corresponding driver chamber.

None of the claims that had been rejected by the Examiner in the last Action had included both of these two features.

Applicant believes that neither Monahan nor EP 124, nor Check, or an alleged combination therefore, disclose or suggest every feature of Applicant's amended claims.

The blind holes 50 in Monahan appear to be the same diameter as the housing holes 40, and the master pins the same diameter as the driver pins 44, and a person of ordinary skill in the art would readily recognize that the drivers of Monahan would pass through the opening of the blind holes when the same are aligned, but are prevented from doing so by the master pins supported on the set blade 54. The set blade (SB1) 54, shown in Fig. 1 of Monahan, can be inserted into the slot 55, but it must remain positioned within the slot 55 for operating a user key.

The set blade 54 has a linear edge along only part of the length of the set blade at only a portion of the stations, whereby only select master pins (e.g., in position A) are raised above the shear line, while the other master pins are supported and positioned by the linear portion of the set blade within the blind holes and below the shear line. None of the set blades shown or described in Monahan, including those shown in the Charts, can raise all of the master pins above the shear line in the alleged second position of the set blade.

The blind holes of EP '124 are smaller than the housing holes, as disclosed in Check. The balls move irreversibly into the blind holes of the prior art embodiment shown in Figs 14-19, or move irreversibly out of the lock within the cavity 81 in the user key shown in Figs. 6-9. Neither EP'124 nor Check teaches a change slot or a change tool.

D. Rejection of Claim 23 under 35 USC 103(a) over Monahan (4,386,002) in view of EP 0918124, and further in view of Smith (4,741,188).

This rejection is rendered moot by Applicant's cancellation of claim 23.

E. Rejection of Claims 44, 57, 61, 62 and 73-75 under 35 USC 103(a) over Monahan (4,386,002) in view of EP 0918124, and further in view of additional teachings of EP 0918124.

The rejection is moot with respect to claims 44, 57, 73 and 74 in view of Applicant's cancellation of these claims.

Regarding remaining claims 61, 62 and 75, and without acquiescing to the characterization of the Monahan and EP'124 references made in the rejection, Applicant requests reconsideration on the basis of the amendments to claims 1 and 60, into which a feature of claim 44 has been incorporated.

F. Rejection of Claims 53, 54, 66 and 67 under 35 USC 103(a) over Monahan (4,386,002) in view of EP 0918124, and further in view of additional teachings of Monahan and Smith.

The Examiner states "Monahan also teaches master shims defined by the topmost wafer 47 as seen in fig. 12. In fig. 94, Smith teaches a shim 583 of a first diameter and a retainer cavity 545 of a second, smaller diameter. It would have been obvious to use a larger diameter shim with a retainer cavity of Monahan, in view of the teaching of Smith, the motivation being to control how many change members may enter a change cavity, in reprogramming a lock."

Without acquiescing to the characterization of the Monahan, EP'124 and Smith references made in the rejection, Applicant requests reconsideration on the basis of the amendments to claims 1 and 60, into which the feature of claim 44 has been incorporated.

G. Prosecution in Applicant's other lock applications

Applicant wishes to call to the Examiner's attention the following applications owned by Applicant and the status thereof, and requests that the Examiner review such related applications.

USSN	Atty Docket	Status
11/192,755	EZL-004M	Issued – US Patent 7,290,418
11/178,627	EZL-005M	Non-final rejection and response
11/374,299	EZL-006	Final rejection

H. Interview

Applicant requests a telephone interview with the Examiner, as is permitted by the Rules, in the event that the amendments and remarks provided herein do not resulting in allowance of some or all such claims.

Conclusion

Applicant believes a full and complete response to the Action has been made. Applicant requests withdrawal of all objections and rejections, and allowance of all claims. In any event, a prompt and early Advisory Action is requested in the event that the Examiner does not enter, or allow, the claim amendments.

Respectfully submitted,

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